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09/746,054	12/21/2000	Toshimichi Nagashima	450100-02906	9861

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EXAMINER

USTARIS, JOSEPH G

ART UNIT PAPER NUMBER

2616

DATE MAILED: 08/12/2004

7

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/746,054

Applicant(s)

NAGASHIMA ET AL.

Examiner

Joseph G Ustaris

Art Unit

2616

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 19 May 2004.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-27 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-27 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Response to Amendment

1. This action is in response to the amendment dated 19 May 2004 in application 09/746,054.

Specification

2. The abstract is objected to because of the following informalities:
- The abstract exceeds the maximum word length of 150 words. Please revise the abstract's contents in order to meet the proper format of an abstract.

Appropriate correction is required.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1, 2, 3, and 25 are rejected under 35 U.S.C. 103(a) as being unpatentable over Matthews, III et al. (US006631523B1) in view of Iwafune et al. (US005880720A) and Dunn (US005945987A).

Regarding claim 1, Matthews, III et al. (Matthews) discloses an interactive entertainment system that distributes video broadcasts as well as program information

to the users (See Fig. 1). The head end or “information supply apparatus” of the system has a database of program information or “summary playback information storage means” and a supplement content database or “additional screen information storage means” (See Fig. 1). The program information and supplement content databases store program summary information and additional information content (See Fig. 1 and 2). The enhanced content server or “additional screen information extraction means” is able to extract supplemental content that will supplement the programming summaries and videos being distributed or “playback distribution means” by the EPG server and continuous media server (See Fig. 1 and 2; column 6 line 30 – column 7 line 40). The user can also define if he wants the distribution of program information to be periodic or “timing specified” or in a selective manner (See column 7 lines 20-40 and column 9 lines 40-55). However, Matthews does not disclose (1) a “user authentication means for receiving authentication information and authenticating the user of the broadcasting contents summary information”, (2) a method where the head end is able to search the program information database based on a user’s search criteria, (3) and a compressing means to compress the program information.

(1) Iwafune et al. (Iwafune) discloses a server system utilized in an interactive television system. The server has an authentication processing application program or “user authentication means” that processes a user identifier or “authentication information” of a user or “authenticating the user” that is using the interactive television system (See column 1 lines 9-15; column 2 lines 32-47; column 6 lines 58-65). The authentication processing application program then loads information that is associated

with the user identifier (See column 3 lines 20-28). Therefore, it would have been obvious to one with ordinary skill in the art at the time the invention was made to modify the interactive entertainment system and head end disclosed by Matthews to include an authentication processing application program that can “authenticate users” using “authentication information”, as taught by Iwafune, in order to provide an efficient means of identifying and managing various users of the interactive entertainment system.

(2) Dunn discloses an interactive entertainment network system where the user has the capability to search for programs stored at the head end. The user defines specified criteria or “specified condition information” at the user interface unit or set-top box (STB) and that is sent to the head end where the head end would begin the search based on the specified criteria or “summary playback information search means” (See column 2 line 65 – column 3 line 25). Therefore it would have been obvious to one with ordinary skill in the art at the time the invention was made to modify the head end disclosed by Matthews to be able to search the program information based on a specified criteria, as taught by Dunn, in order to provide the user the capability of finding only the programs that are of interest or desired, thus reducing the browsing time for the user.

(3) Official Notice is taken that it is well known to compress data or “summary contents shortening means for compressing” before sending it over a transmission medium. Therefore, it would have been obvious to one with ordinary skill in the art at the time the invention was made to modify the head end disclosed by Matthews to

compress data in order to efficiently use the available bandwidth of the transmission medium in order to deliver data in a timely fashion.

Regarding claim 2, the program information database stores data in a table format. The table gives information such as, storage pointers or "frame numbers" that locates the program within a storage unit. It also lists the times of the broadcasts (See Matthews Fig. 2).

Regarding claim 3, Dunn discloses that the user can use various methods of performing a search. The user provides a viewer ID or "ID specifying broadcasting unit" (See column 9 lines 55-65), specifies a certain star name or "keyword specified by a user" (See column 3 lines 1-5), or species a particular program title or "information ID" (See column 8 lines 1-11). The head end would search based on the criteria provided by the user.

Regarding claim 25, Matthews in view of Iwafune and Dunn discloses a system that performs the method claimed. Please see claim 1.

Claim 4 is rejected under 35 U.S.C. 103(a) as being unpatentable over Matthews, III et al. (US006631523B1) in view of Iwafune et al. (US005880720A) and Dunn (US005945987A) as applied to claims 1, 2, 3, and 25 above, and further in view of Anderson et al. (US006005631A).

Matthews in view of Iwafune and Dunn lacks a method where the head end returns the search criteria back to the STB along with the program information found by the search.

Anderson et al. (Anderson) discloses a method and apparatus for organizing and searching and EPG. After a search is complete the server or head end generates a list of results and how it relates to the search criteria and it is transmitted to the home communications terminal or STB (See column 12 line 48 – column 13 line 19). Therefore, it would have been obvious to one with ordinary skill in the art at the time the invention was made to modify the head end disclosed by Matthews in view of Iwafune and Dunn to be able to return the search criteria to the STB, as taught by Anderson, in order to verify and show how the search criteria was met by the search performed by the head end.

Claims 5, 6, and 7 are rejected under 35 U.S.C. 103(a) as being unpatentable over Matthews, III et al. (US006631523B1) in view of Iwafune et al. (US005880720A) and Dunn (US005945987A) as applied to claims 1, 2, 3, and 25 above, and further in view of Abecassis (US006553178B2).

Regarding claim 5, Matthews in view of Iwafune and Dunn lacks a feature where the specified criteria also contains information on a viewable time defined by the user.

Abecassis discloses a Video-on-Demand (VOD) system where the user can define a time and date that the user desires to view the video within a viewer's preferences setting (See column 7 lines 5-15). Furthermore, based on the demand on the system at the user's specified time and date, the system could send the video to the user using burst downloading or "shortening means" (See column 37 lines 30-50). Therefore, it would have been obvious to one with ordinary skill in the art at the time the

invention was made to modify the head end disclosed by Matthews in view of lwafune and Dunn to be able to allow the user to define a viewable time within the specified criteria, as taught by Abecassis, in order to give the user more flexibility and convenience in deciding when to view the program information.

Regarding claim 6, the time and date specified by the user is also considered a "distribution method ID", wherein the time and date identifies when the head end would distribute the program information (See claim 5).

Regarding claim 7, the head end disclosed by Matthews in view of lwafune and Dunn and further view of Abecassis allows the user to define if he wants the distribution of program information to be periodic or "daily predetermined time" or in a selective manner (See Matthews column 7 lines 20-40 and column 9 lines 40-55). In the case of the selective manner, Abecassis teaches that the user can define a viewable time or "distributable time" (See claim 5 and 6).

Claims 8 and 9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Matthews, III et al. (US006631523B1) in view of lwafune et al. (US005880720A) and Dunn (US005945987A) as applied to claims 1, 2, 3, and 25 above, and further in view of Kamada et al. (US 20030056208A1).

Regarding claim 8, Matthews in view of lwafune and Dunn lacks a feature where the head end is able to collect viewing results and create statistics.

Kamada et al. (Kamada) discloses a method and device for obtaining audience data on a TV program. The receiver or STB of the system monitors what the user views

and records the program ID or "viewing results collection means." The STB continuously monitors the user and periodically sends the results to a collection center or head end or "client management means" where calculations can be made or generating "statistics" (See abstract, paragraphs 0011, 0017, 0082, and 0087). Therefore, it would have been obvious to one with ordinary skill in the art at the time the invention was made to modify the head end disclosed by Matthews in view of Iwafune and Dunn to be able to collect viewing results and generate statistics, as taught by Kamada, in order to enhance the head end by enabling it to provide the broadcast providers a more accurate means of measuring which programs were viewed or not.

Regarding claim 9, both Matthews and Dunn disclose that the system can perform common tasks such as to conduct banking and other financial transactions, where inherently involves transmitting account information (i.e. account number) to a financial settlement institution (See Matthews column 2 lines 10-25 and Dunn column 7 lines 10-20).

Claims 10 and 11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Matthews, III et al. (US006631523B1) in view of Iwafune et al. (US005880720A) and Dunn (US005945987A) and further in view of Kamada et al. (US 20030056208A1) as applied to claims 8 and 9 above, and further in view of Goldman et al. (US 20030135853A1).

Regarding claim 10, Matthews in view of Iwafune and Dunn and in further view of Kamada disclose that the supplement content database is also able to store

advertisements or "advertisement information storage means" and the advertisements would be distributed in the same manner as described in claim 1 by the enhanced content server and EPG server (See Matthews column 7 lines 5-20). However, Matthews in view of Iwafune and Dunn and in further view of Kamada lacks a method of selecting specific advertisements to be distributed based on users viewing results.

Goldman et al. (Goldman) discloses a system and method of inserting advertisements. The system selects and inserts advertisements or "advertisement selection means" to be displayed to the user, wherein the selection is based in part on television programming viewed by the user or "basis of the viewers statistic information" (See paragraphs 0012-0014). Therefore, it would have been obvious to one with ordinary skill in the art at the time the invention was made to modify the head end disclosed by Matthews in view of Iwafune and Dunn and in further view of Kamada to select advertisements based on the viewing results of the user, as taught by Goldman, in order to provide the user with advertisements that are closely related to their interests.

Regarding claim 11, Official Notice is taken that it is well known to include URLs or web addresses or "communication address of electronic communication network" within an advertisement. Therefore, it would have been obvious to one with ordinary skill in the art at the time the invention was made to modify the advertisements disclosed by Matthews in view of Dunn and Iwafune and in further view of Kamada and Goldman to include URLs or web addresses in order to provide users with an alternative location to retrieve more information about the advertisement contents if needed.

Claims 12-15, 17-20, 22-24, 26, and 27 are rejected under 35 U.S.C. 103(a) as being unpatentable over Matthews, III et al. (US006631523B1) in view of Iwafune et al. (US005880720A) and Dunn (US005945987A) and Barth (US 20030135864A1).

Regarding claim 12, Matthews, III et al. (Matthews) discloses an interactive entertainment system that distributes video broadcasts as well as program information to the users (See Fig. 1). The head end or "information supply apparatus" of the system delivers information, as discussed in claim 1, to a STB or "information utilization apparatus" (See Fig. 1). The STB has an EPG program that is able to receive and process the information sent by the head end or "summary related information reception means" (See column 1 lines 55-65). The STB is also able to display the program information and supplemental content on a TV or "additional screen display means" (See Fig. 1, 5, and 7). The EPG program uses the received program information database to locate video programs on the server. The program information is in a table format that has pointers to locate information and video programs on all the databases or "frame search means" (See Fig. 2). Ultimately, the STB would display the video program on the TV or "image playback means" (See Fig. 1 and column 5 lines 40-65). However, Matthews does not disclose a (1) "user authentication means for receiving authentication information and authenticating the user of the broadcasting contents summary information", (2) a method where the STB would allow the user to input search criteria and transmit the criteria to the head end, (3) and a storage device for video programs within the STB.

(1) Iwafune et al. (Iwafune) discloses a server system utilized in an interactive television system. The server has an authentication processing application program or “user authentication means” that processes a user identifier or “authentication information” of a user or “authenticating the user” that is using the interactive television system (See column 1 lines 9-15; column 2 lines 32-47; column 6 lines 58-65). The authentication processing application program then loads information that is associated with the user identifier (See column 3 lines 20-28). However, Iwafune does not disclose that the authentication process can occur at the STB.

Official Notice is taken that is it well known for receivers or STBs to perform authentication processes. Therefore, it would have been obvious to one with ordinary skill in the art at the time the invention was made to modify the interactive entertainment system and STB disclosed by Matthews to include an authentication processing application program that can “authenticate users” using “authentication information”, as taught by Iwafune, at the STB, in order to provide an efficient means of identifying and managing various users of the interactive entertainment system and to reduce the processing load of the head end.

(2) Dunn discloses an interactive entertainment network system where the user has the capability to search for programs or program information stored at the head end. The user defines specified criteria or “specified condition information” at the user interface unit or set-top box (STB) and that is sent to the head end where the head end would begin the search based on the specified criteria (See column 2 line 65 – column 3 line 25). Therefore it would have been obvious to one with ordinary skill in the art at the

time the invention was made to modify the STB disclosed by Matthews to be able to allow the user to input search criteria and send the criteria to the head end, as taught by Dunn, in order to provide the user the capability of finding only the programs that are of interest or desired, thus reducing the browsing time for the user.

(3) Barth discloses a digital decoder or STB used within service-on-demand systems such as video-on-demand. Barth discloses that it is well known to store video movies or video programs or "broadcast contents information storage means" in the STB of the user (See paragraph 0006). Therefore, it would have been obvious to one with ordinary skill in the art at the time the invention was made to move the video program database from the head end to the STB, as taught by Barth, in order to reduce the load of the transmission medium, thus making to more available to other users.

Claim 13 contains the limitations of claims 2 and 12 and is analyzed as previously discussed with respect to those claims.

Claims 14 and 15 contains the limitations of claims 3, 5-7, and 12 and is analyzed as previously discussed with respect to those claims.

Claim 17 contains the limitations of claims 10 and 12 and is analyzed as previously discussed with respect to those claims.

Claim 18 contains the limitations of claims 11, 12, and 17 and is analyzed as previously discussed with respect to those claims.

Claim 19 contains the limitations of claims 8 and 12 and is analyzed as previously discussed with respect to those claims.

Regarding claim 20, the user is presented with a graphics interface on the display where the user can further define the search criteria or "gradually restricting the specified range" (See Dunn Fig. 4, 5, and 9).

Claim 22 contains the limitations of claims 1 and 12 (wherein the STB and head end form the "information supply system") and is analyzed as previously discussed with respect to those claims.

Claim 23 contains the limitations of claims 8, 19, and 22 and is analyzed as previously discussed with respect to those claims.

Claim 24 contains the limitations of claims 21 and 22 and is analyzed as previously discussed with respect to those claims.

Regarding claim 26, Matthews in view of Dunn and Barth discloses a system that performs the method claimed. Please see claim 12.

Claim 27 contains the limitations of claims 20 and 26 and is analyzed as previously discussed with respect to those claims.

Claim 16 is rejected under 35 U.S.C. 103(a) as being unpatentable over Matthews, III et al. (US006631523B1) in view of Iwafune et al. (US005880720A) and Dunn (US005945987A) and Barth (US 20030135864A1) as applied to claims 12-15, 17-20, 22-24, 26, and 27 above, and further in view of Blackwell et al. (US006449654B1).

Matthews in view of Iwafune, Dunn, and Barth lacks a feature where the STB would verify the results of the search received from the head end based on the specified criteria defined by the user.

Blackwell et al. (Blackwell) discloses system and method for retransmitting data within a cable television network. The STB of the system would verify or “certification means” if all the data were received that was supposed to be transmitted by comparing the received data to a manifest or specified criteria (See Fig. 9 and column 15 line 49 – column 16 line 30). Therefore, it would have been obvious to one with ordinary skill in the art at the time the invention was made to modify the STB disclosed by Matthews in view of Iwafune, Dunn, and Barth to verify the results of the search received from the head end based on the specified criteria defined by the user, as taught by Blackwell, in order to ensure that all search criteria was met and that the results were successfully transmitted to the STB.

Claim 21 is rejected under 35 U.S.C. 103(a) as being unpatentable over Matthews, III et al. (US006631523B1) in view of Iwafune et al. (US005880720A).

Matthews, III et al. (Matthews) discloses an interactive entertainment system or “information manipulation apparatus” that distributes video broadcasts as well as program information to the users (See Fig. 1). The head end of the system has a database of video programs or “broadcasting contents information storage means” and an electronic program guide (EPG) server or “information processing server” (See Fig. 1). The EPG server stores program information in a table or “template” (See Fig. 2) and uses the table to locate videos and supplemental content stored at other databases. The continuous media server, EPG server, and enhanced content server work together to store and extract video programs and supplement content to/from their respective

databases. The EPG server contains the table or “template” that utilizes pointers to divide the programs stored within the video program database. The servers working in unison is considered the “material information accumulation server” and the EPG server is also considered the “information process means”, where the EPG stores tables that contain descriptions or “summary playback information” (See Fig. 1 and 2; column 6 line 30 – column 7 line 40). However, Matthews does not disclose a “user authentication means for receiving authentication information and authenticating the user of the broadcasting contents summary information”.

Iwafune et al. (Iwafune) discloses a server system utilized in an interactive television system. The server has an authentication processing application program or “user authentication means” that processes a user identifier or “authentication information” of a user or “authenticating the user” that is using the interactive television system (See column 1 lines 9-15; column 2 lines 32-47; column 6 lines 58-65). The authentication processing application program then loads information that is associated with the user identifier (See column 3 lines 20-28). Therefore, it would have been obvious to one with ordinary skill in the art at the time the invention was made to modify the interactive entertainment system and head end disclosed by Matthews to include an authentication processing application program that can “authenticate users” using “authentication information”, as taught by Iwafune, in order to provide an efficient means of identifying and managing various users of the interactive entertainment system.

Response to Arguments

4. Applicant's arguments filed 19 May 2004 have been fully considered but they are not persuasive.

The amendment to the abstract has not been entered because it does not follow the rules set forth in 37 CFR 1.72(b) (See MPEP 608.01(b)). Therefore, the objection to the abstract still stands.

The applicant argues, with regards to claim 21 and further makes similar arguments with regards to claims 1, 12, 22, 25, 26, and the dependent claims, that Matthews fails to teach creating a summary playback information and a user authentication means. However, Matthews does teach creating an EPG or "summary playback information", where the EPG displays program summaries or "summary contents of broadcasting contents information" (See Matthews Fig. 5 element 120). Furthermore, Iwafune teaches a method to authenticating users in an interactive television system as discussed in the claim rejections above.

Therefore, respectfully, the rejection on pending claims 1-27 still stands.

Conclusion

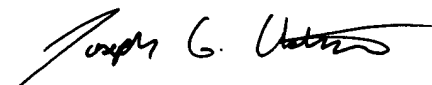
5. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).


A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Joseph Ustaris whose telephone number is (703) 305-0377. The examiner can normally be reached on Monday-Friday with alternate Fridays off from 7:30 A.M. to 5:00 P.M.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Andrew Faile, can be reached on (703) 305-4380. The fax phone number for this Group is (703) 872-9306.

Any inquiry of general nature or relating to the status of this application or proceeding should be directed to the Group Receptionist whose telephone number is (703) 305-4700.


JGU
July 28, 2004


VIVEK SRIVASTAVA
PRIMARY EXAMINER